VEBM370100

SHOP MANUAL

KOMATSU®

PW200-7H
PW220-7H

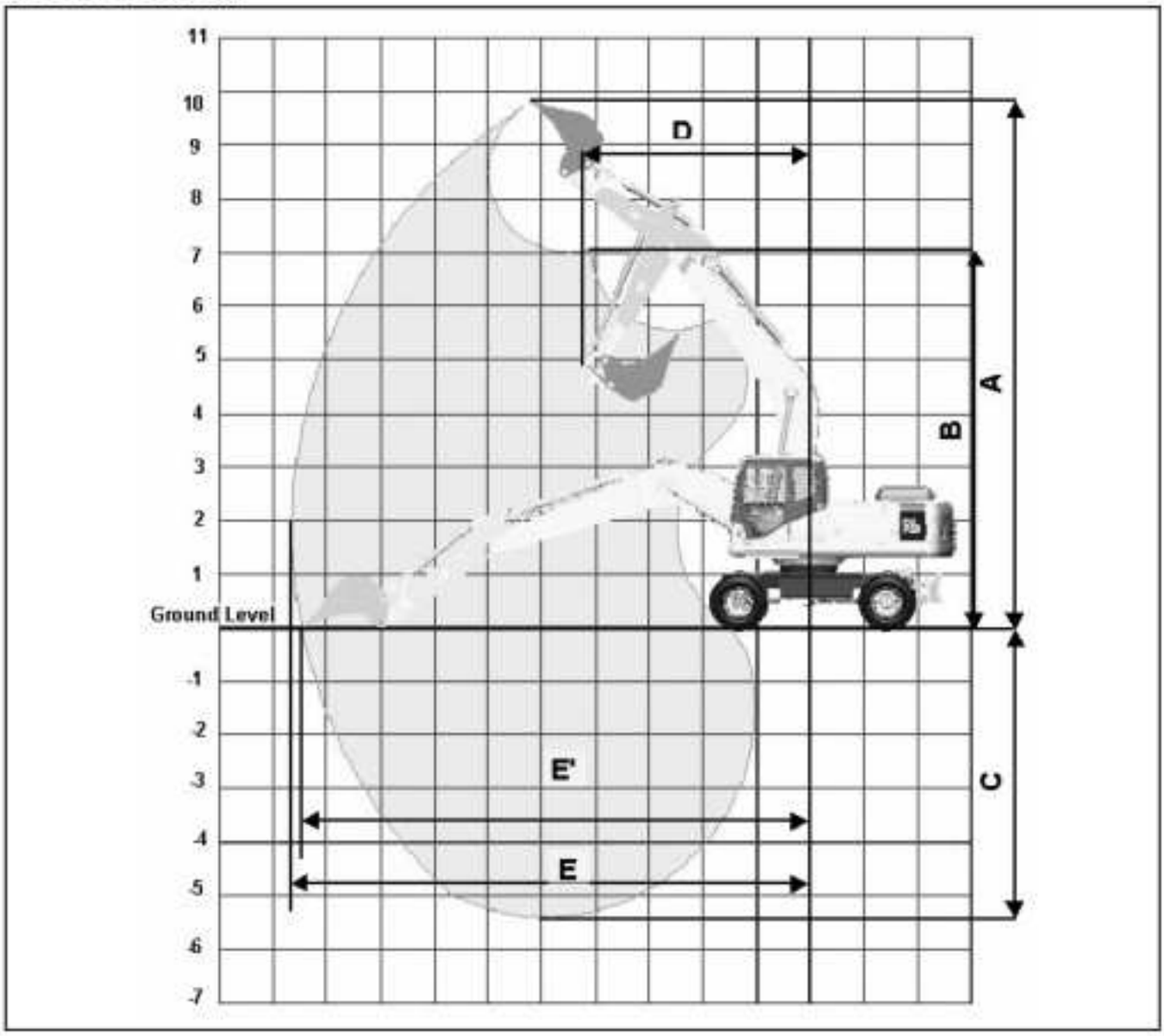
MACHINE MODEL	SERIAL NUMBER
PW200-7H	**H50051 AND UP**
PW220-7H	**H50051 AND UP**

- This shop manual may contain attachments and optional equipment that are not available in your area. Please consult your local Komatsu distributor for those items you may require.
  Materials and specifications are subject to change without notice.
- PW200/PW220-7H mount the SAA6D102E-2 engine.
  For details of the engine, see the 102 Series Engine Shop Manual.

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WORKING RANGES

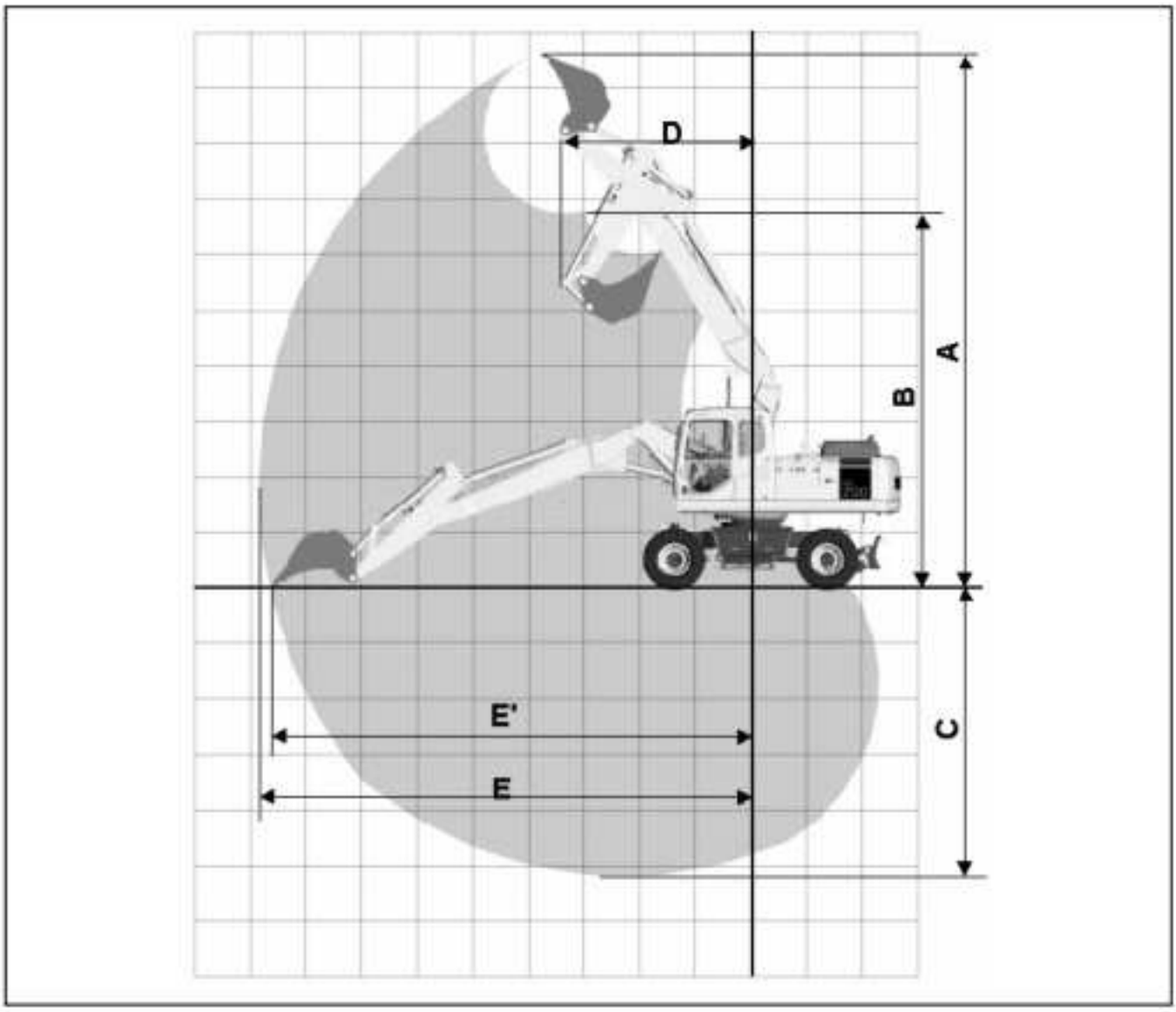
1 PIECE BOOM



Arm length mm (Tt/In)		1800	2400	2900	3500
A	Max. digging height	9467	9883	10003	10438
B	Max. dumping height	6704	7057	7229	7612
C	Max. digging depth	4791	5402	5917	6500
D	Min. swing radius	3906	3201	3143	3184
E'	Max. digging reach ay GL	8867	9438	9875	10478
E	Max. digging reach	9067	9651	10060	10642

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2 PIECE BOOM



Arm length mm (Tt/In)		1800	2400	2900	3500
A	Max.digging height	9532	9842	10168	10434
B	Max.dumping height	6670	6982	7298	7574
C	Max digging depth	5166	5785	6285	6860
D	Min. swing radius	2594	3121	2745	2866
E'	Max. digging reach ay GL	8599	9144	9634	10156
E	Max. digging reach	8818	9348	9822	10338

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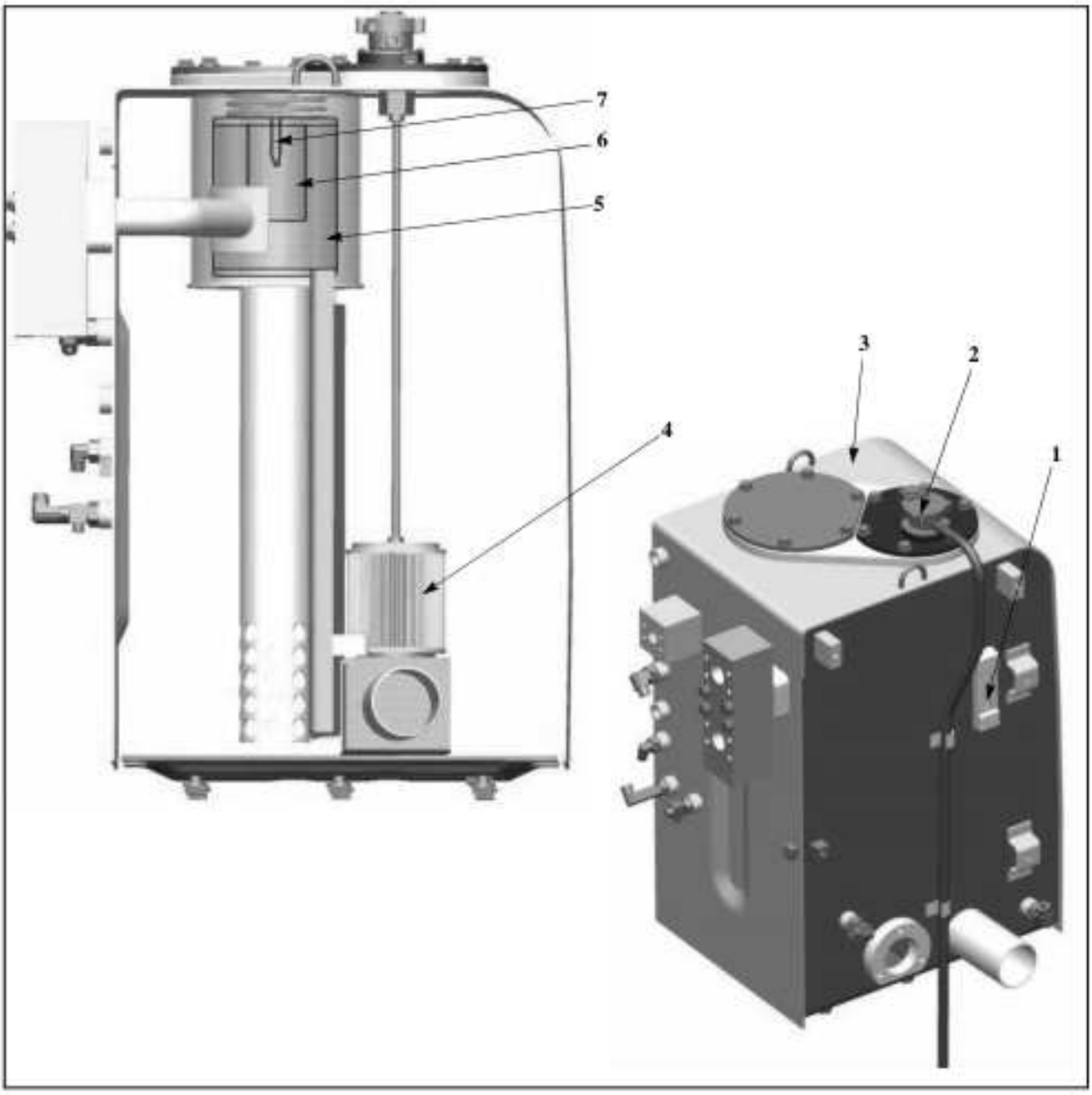
SPECIFICATIONS

PW200-7, PW220-7

Machine model				PW200-7	PW220-7	PW220-7 (Heavy duty option)
Serial Number				H50051 and up		
Bucket capacity		Arm size (m)	m^3	0.8	1.0	
Operating weight			kg	19,900	20,400	21,160
Performance	Max. digging force (using power max. function)	1.8	kN (kg)	138.3 {14,100} (149.1 {15,200})	138.3 {14,100} (149.1 {15,200})	
		2.4				
		2.9			163 {16,621} (176 {17,947})	
		3.5				
	Swing speed		rpm	12.4		
	Swing max. slope angle		deg.	20		
	Travel speed		km/h	Cr : 0-2 Lo : 0-9 Hi : 10-35 (Germany :10-20)		
	Gradeability		deg. kPa {kg cm^2}	35 36.3 (0.37)		
	Standard Tyre Width		mm	10.00 - 20	11.00 - 20	

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HYDRAULIC TANK



1. Sight gauge
2. Oil filler cap
3. Hydraulic tank
4. Suction strainer Y filter micron
5. Filter element Y filter micron
6. Strainer
7. Bypass valve

SPECIFICATIONS

Tank	200 l
Amount of oil inside tank	143 l
Pressure valve	
Relief cracking pressure	16.7 +/-6.9 kPa
	(0.17 +/-0.07 kg/cm^2)
Suction cracking pressure	0 - 0.49 kPa
	(0 - 0.005 kg/cm^2)
Bypass valve set pressure	150 +/- 30 kPa
	(1.5 +/- 0.3 kg/cm^2)

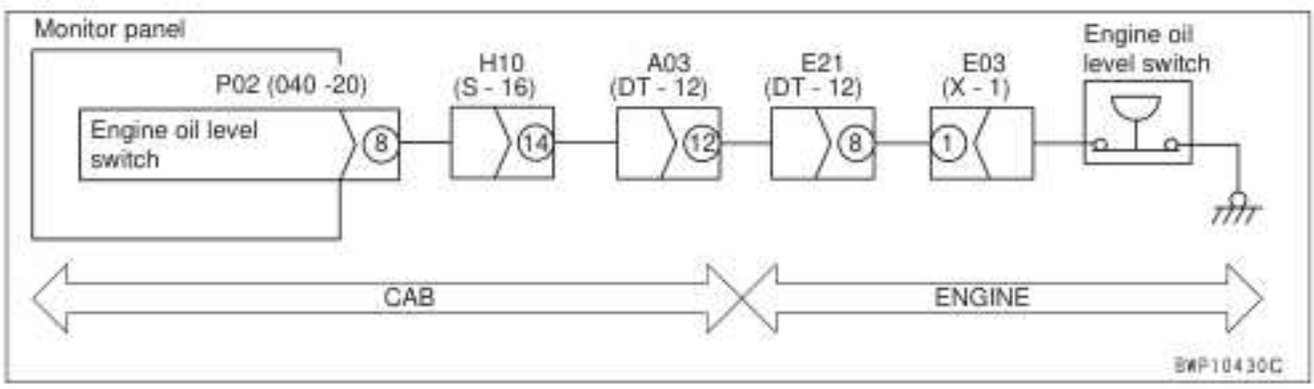
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Failure Code in Mechanical System B@BAZK (Abnormally lowered engine oil level)

User Code	Service Code	Failure Code	Failure phenomenon	Engine oil level abnormally lowered (in mechanical system)
—	—	B@BAZK		
Failure content	▸ The signal circuit in the engine oil level switch was opened (i.e. disconnected from grounding), when the engine is stopped (with the starting switch in the ON position).			
Response from controller	▸ None in particular			
Phenomenon occurring on machine	▸ There is a possibility that the engine seizes if it is kept running without a corrective action.			
Relative information	▸ This Failure Code is recorded if the engine oil level caution symbol is displayed, when the engine is stopped (with the starting key in the ON position). ▸ Input from the engine oil level switch (ON or OFF) can be confirmed in the monitor function. (Code No. 046: Monitor input 2)			

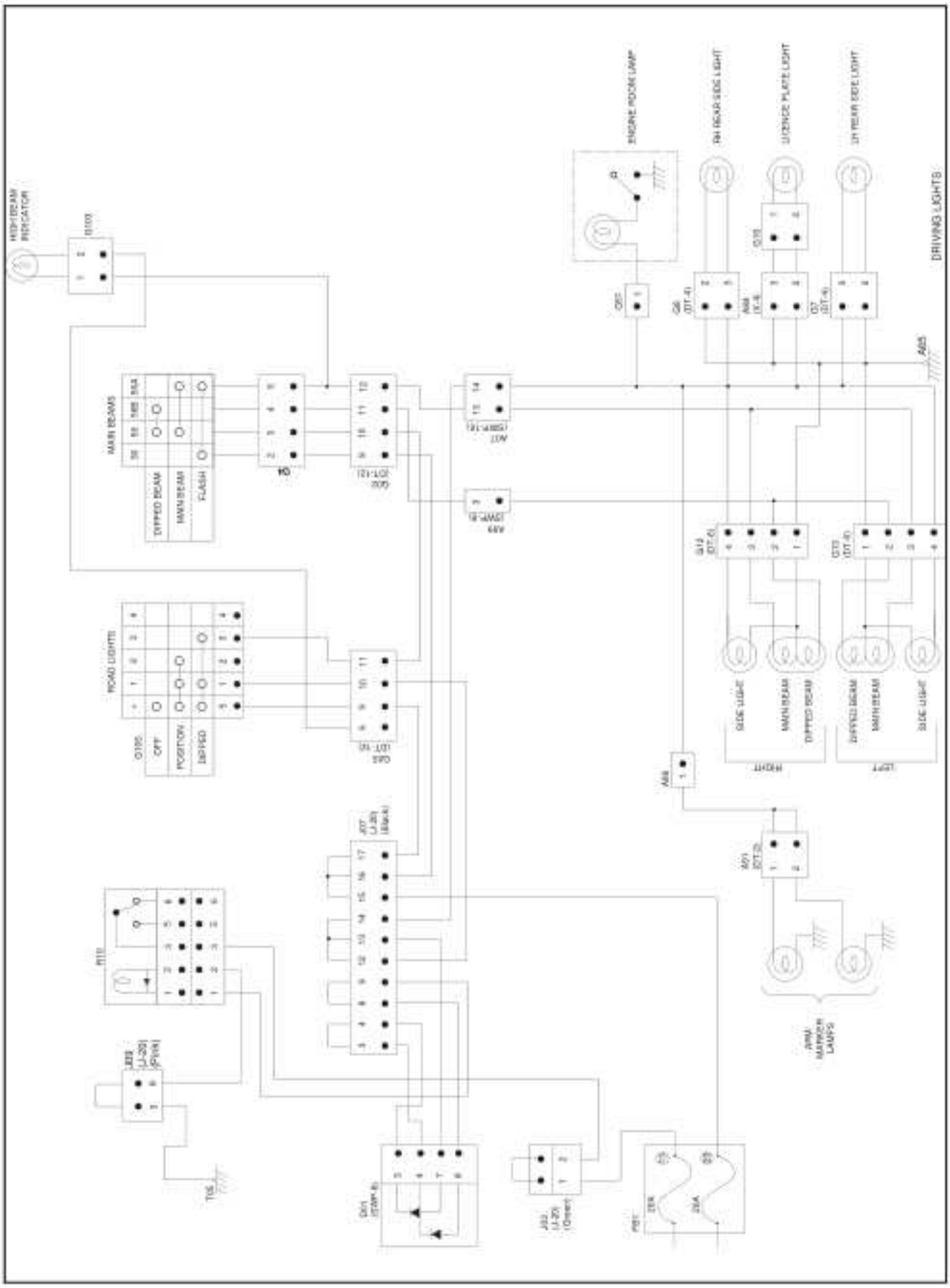
Presumed cause and standard value in normal		Cause	Standard value in normal and references for troubleshooting		
	1	Engine oil level lowered (System in normal condition)	▸ Check the engine oil level, and refill oil. (If the phenomenon occurs frequently, check the cause)		
	2	Engine oil level switch defective (Internal disconnection)	▸ Turn the engine starting switch OFF for the preparations, and hold it in the OFF position during the troubleshooting.		
			E03 (male)	Engine oil level	Resistance value
			Between ① and grounding	When in normal condition	Below 1 Ω
				When lowered	Above 1 MΩ
	3	Disconnection of wiring harness (Disconnection or defective contact with connector)	▸ Turn the engine starting switch OFF for the preparations, and hold it in the OFF position during the troubleshooting.		
			Wiring harness between P02 (female) ⑧ and E03 (female) ①	Resistance value	Below 1 Ω
	4	Monitor panel defective	▸ Turn the engine starting switch OFF for the preparations, and hold it in the ON position during the troubleshooting.		
			P02	Engine oil pressure	Voltage
			Between ⑧ and grounding	When in normal condition	Below 1 V
				When lowered	20 – 30 V

Electrical Circuit Diagram for Engine Oil Level Switch in Monitor Panel



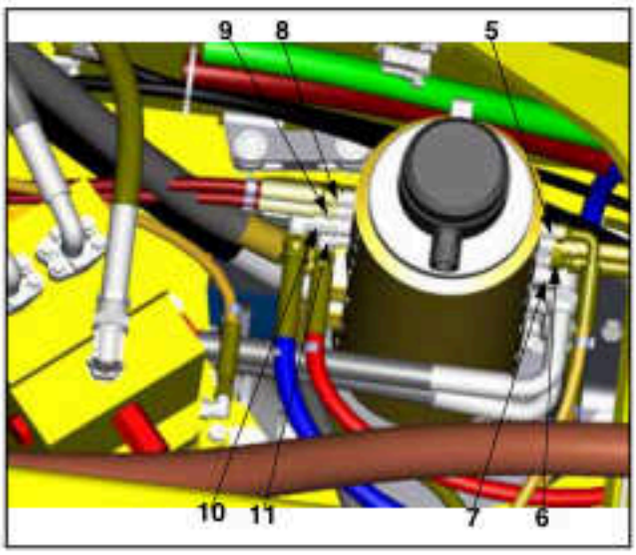
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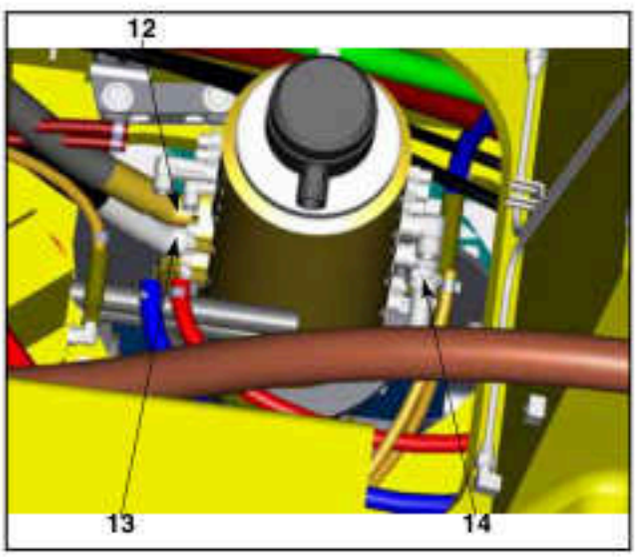
Circuit Diagram for Driving Lights

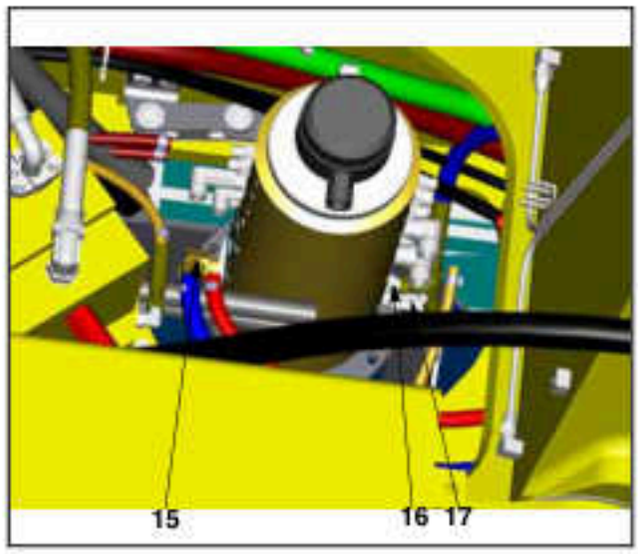


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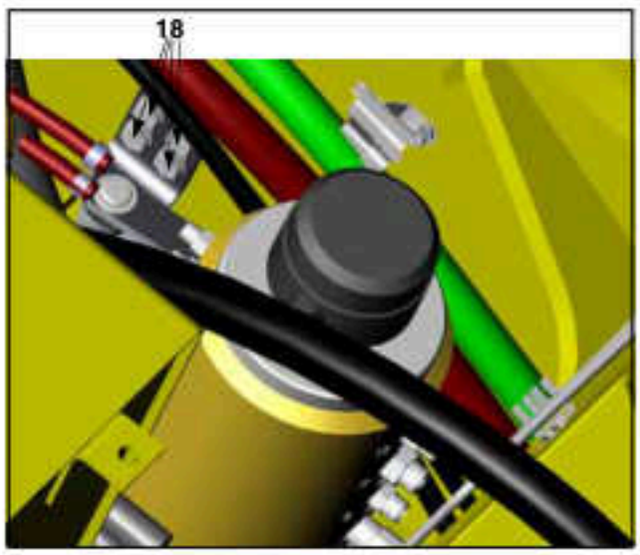
7. Disconnect the 13 hoses on the swivel joint assembly at the swivel joint side.
   (5): Suspension lock
   (6): Brake 2
   (7): Attachment bottom
   (8): 2nd clutch
   (9): 1st clutch
   (10): Steer right
   (11): Brake 1
   (12): Travel B
   (13): Travel A
   (14): Attachment Head
   (15): Drain
   (16): Motor volume pilot
   (17): Steer left



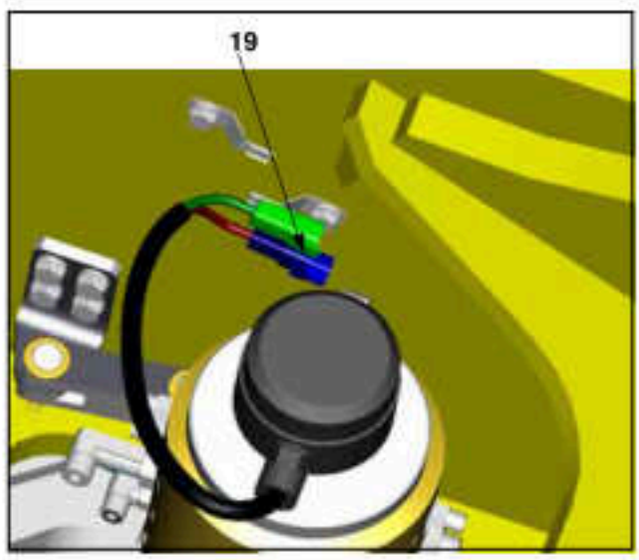




8. Remove 4 bolts (18) from revolving frame.

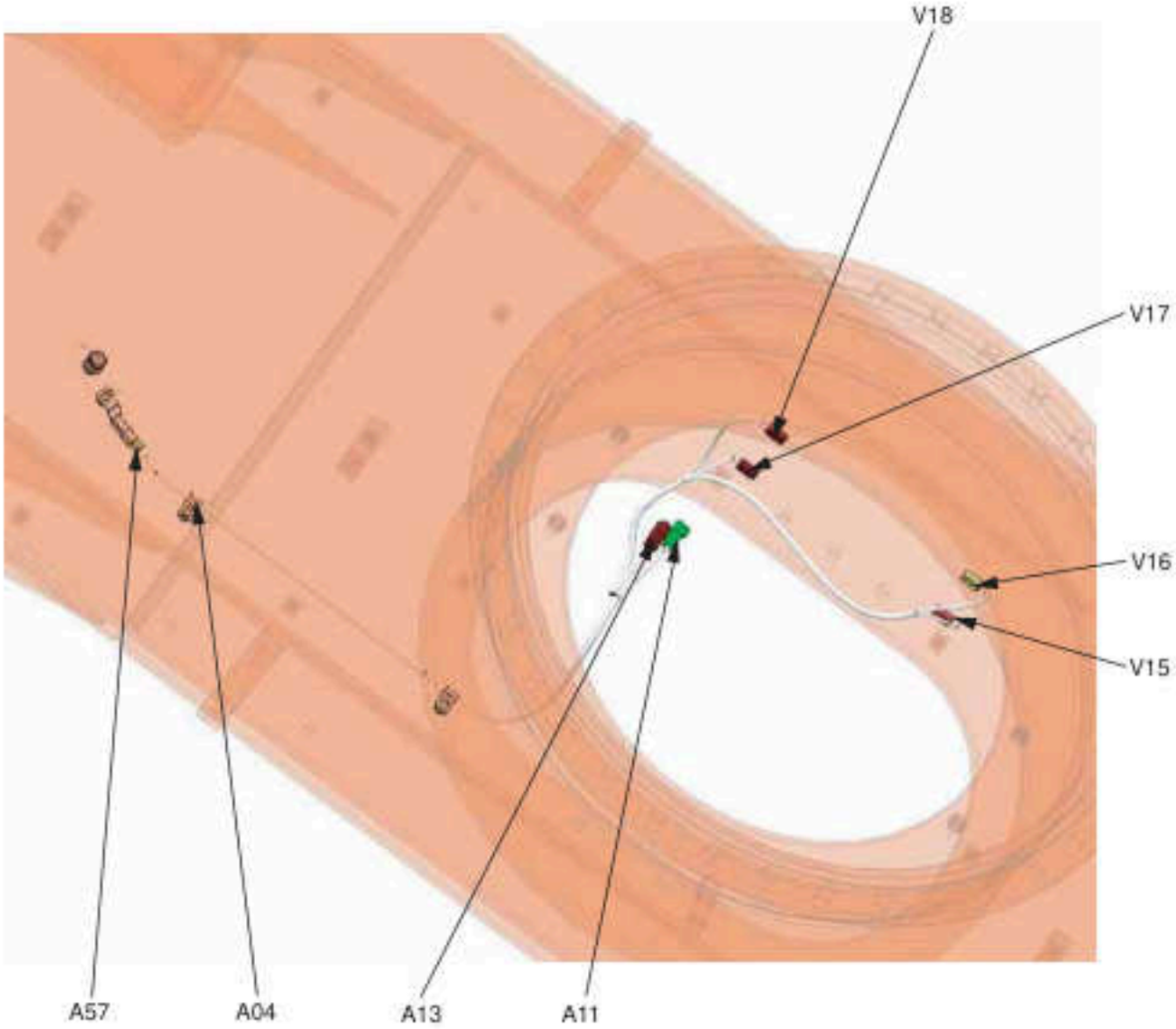


9. Disconnect connector (19).



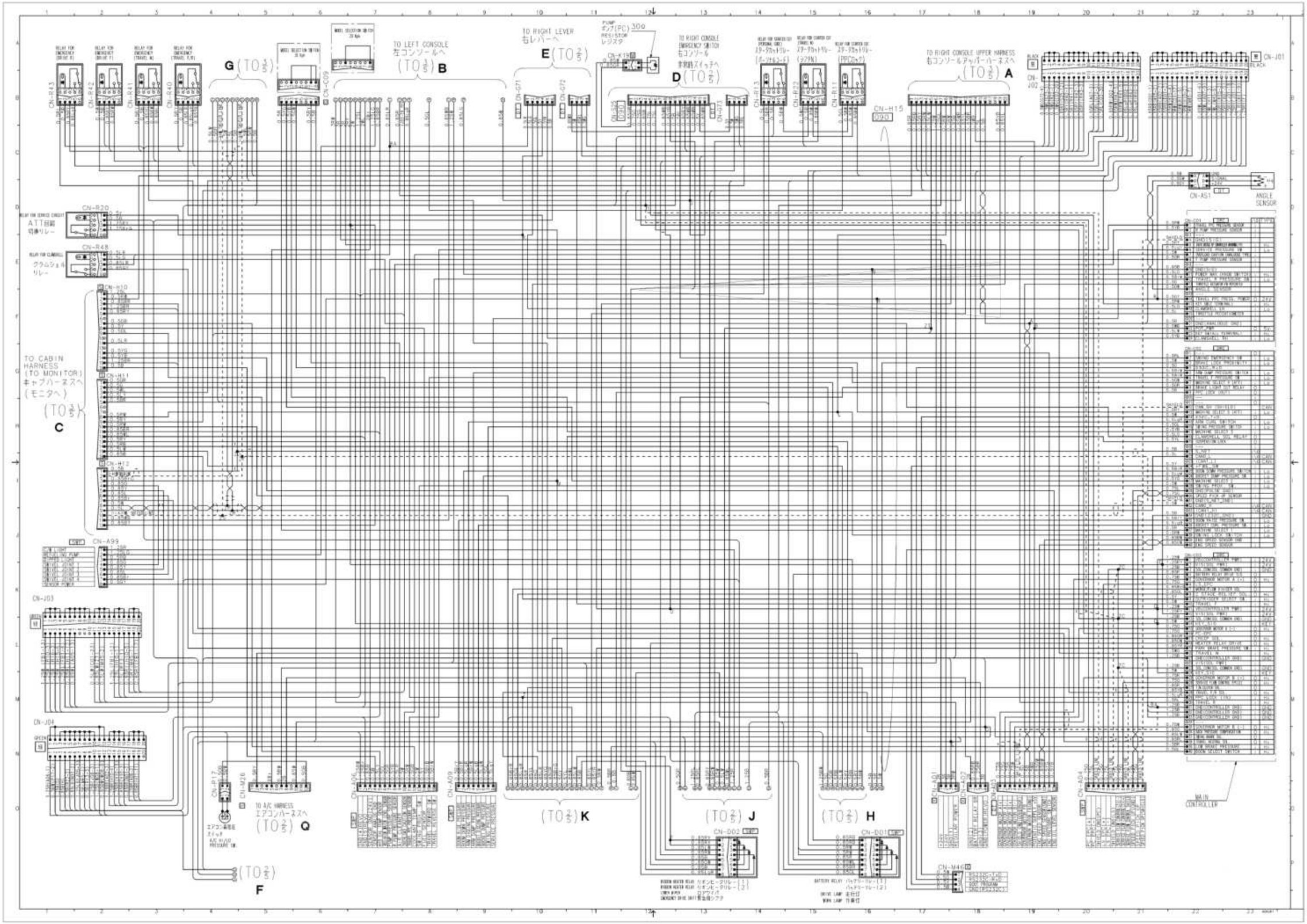
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Undercarriage Harness



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ELECTRICAL CIRCUIT DIAGRAM 1/5



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